

REMARKS

Claims 1-27 are currently pending in the application. Claims 1, 12, 22, 24 and 26 are independent claims and claims 2-11, 13-21, 23, 25, and 27, respectively, depend from the independent claims. The Applicants request reconsideration of the claims in light of the following remarks.

Claims 1-21 were rejected under 35 U.S.C. § 103(a) as being obvious over Johanson US Patent 3,975,599 (“Johanson”) in view of Berland US Patent 4,142,072 (“Berland”) and Mayer US Patent 5,341,433 (“Mayer”). Applicants respectfully traverse the rejections.

Regarding claim 1, according to the Office Action, Johanson fails to teach a) circuitry for sensing whether an actuator switch is in a first position or a second position, b) circuitry for selecting an output based upon a position sensed, and c) a microphone cartridge having a front inlet port acoustically coupled to a front inlet tube and a rear inlet port acoustically coupled to a rear inlet tube. The Applicants agree that Johanson fails to disclose at least all of the features set forth above.

The Office Action seeks to remedy part of the deficiencies of Johanson by modifying Johanson with the teachings of Berland, as follows. According to the Office Action, Berland teaches a microphone cartridge 7 having a front inlet port 2 acoustically coupled to a front inlet tube 13 and a rear inlet port 3 acoustically coupled to the rear inlet tube 11, and it would have been obvious to combine the teachings of Johanson and Berland to provide a hearing aid with an outer front opening and an outer rear opening which are connectable to the respective of a membrane in a microphone within the housing of the hearing aid for directional use, and with mechanical means for closing the outer rear opening for omnidirectional use. The Applicants respectfully disagree.

The Applicants respectfully assert that the Office Action has taken liberties with the Applicants’ claims. The Applicants’ claim 1 does not recite, “a hearing aid with an outer front opening and an outer rear opening which are connectable to a respective membrane in a microphone within a housing of the hearing aid for directional use, and with mechanical means for closing the outer rear opening for omnidirectional use” as stated in the Office Action. It is

apparent that the Office Action is inventing a device *not specifically claimed* (emphasis added) by the Applicants.

Additionally, the Office Action appears to be inventing a different object because the Office Action recites “an outer front opening and an outer rear opening which are *connectable* (emphasis added) to a respective membrane in a microphone”, whereas the Applicants’ claim 1 sets forth a microphone cartridge having a front inlet port acoustically *coupled* (emphasis added) to the front inlet tube and a rear inlet port acoustically *coupled* (emphasis added) to the rear inlet tube. The Applicants set forth that the ports, as set forth in claim 1, are acoustically coupled to the inlet tubes, not *connectable* (emphasis added) thereto, as suggested in the Office Action.

Further, the Applicants assert that significant invention would be required to arrange the device taught by Johanson in a fashion remotely similar to the device disclosed by Berland. In particular, it is unclear to the Applicants how Johanson could be modified to provide “a hearing aid with an outer front opening and an outer rear opening that is connectable to a membrane in a microphone within a housing of the hearing aid”, as suggested by the Office Action, in light of the teaching of Berland, without a significant inventive rearrangement of the components disclosed in both the Johanson and Berland devices.

The Applicants assert that Johanson is significantly differently arranged than Berland at least because when Johanson opens tube A, as shown in Figure 3, tube C is simultaneously closed, and when tube C is opened, as shown in Figure 3, tube A is simultaneously closed forcing Johanson to use a third tube 38, as shown in Figure 2. In Berland, on the other hand, opening and closing of tube 11 has no effect on the open-ness or closed-ness of tube 4. The Applicants do not understand how the Office Action intends to modify Johanson and Berland to overcome the recited deficiencies. The Applicants assert that any proposed combination would require extensive invention and would ultimately fail to operate. Further, Applicants assert that any proposed combination of Johanson and Berland fails to disclose the features set forth in the Applicants claim 1.

The Office Action seeks to further modify the proposed combination of Johanson and Berland employing the teaching of Meyer. Note: The Applicants assume that the Office Action intends to modify the proposed combination of Johanson and Berland, although the Office

Action merely recites modifying Johanson with the teaching of Meyer, and is silent regarding what role if any Berland is to be used in the instant proposed combination. According to the Office Action, Meyer teaches a circuitry (Figure 1, reference number 3) for sensing 21 whether actuator switches (16, 6) (two different switches) are in first positions (valve up) or second positions (valve down), and for selecting an output based upon the positions sensed, and it would be obvious to combine the teachings of Johanson and Meyer to provide keys, switches, slides, switchovers, joysticks, control elements, regulators, volume control or the like, are formed by pressure sensors or, respectively, pressure and position sensors. The Applicants respectfully disagree.

The Applicants respectfully assert that the Office Action has again taken liberties with the Applicants' claims. The Applicants' claim 1 does not recite, "providing keys, switches, slides, switchovers, joysticks, control elements, regulators, volume control, or the like, are formed by pressure sensors or, respectively, pressure and position sensors" as stated in the Office Action. It is apparent that the Office Action is inventing a device *not specifically claimed* (emphasis added) by the Applicants.

Additionally, the Office Action appears to be inventing a different object because the Office Action recites "a circuitry for sensing whether actuator switches (16, 6) (two different switches) are in first positions (valve up) or second positions (valve down), and for selecting an output based upon the positions sensed" (Which switch? Both switches?), whereas the Applicants' claim 1 sets forth circuitry for sensing whether an actuator switch (one actuator switch) is in a first position or a second position, and circuitry for selecting an output based upon the position sensed (of the actuator switch). The Applicants set forth an actuator switch, and not a pair of separate actuator switches, as suggested in the Office Action. Meyer does not disclose circuitry for selecting an output based upon a sensed position of an actuator switch as set forth in Applicants' claim 1.

Further, the Applicants assert that significant invention would be required to arrange the device taught by Johanson in a fashion remotely similar to the device disclosed by Meyer, even if combined with Berland. In particular, it is unclear to the Applicants how Johanson could be modified to provide "a circuitry for sensing whether actuator switches (16 and 6) are in first

positions (valve up) or second positions (valve down), and for selecting an output based upon the positions sensed”, as suggested by the Office Action, in light of the teaching of Meyer, without a significant inventive rearrangement of the components disclosed in Johanson, Meyer, and/or Berland.

The Applicants assert that Johanson is significantly differently arranged than Meyer at least because Johanson opens and closes a tube which requires a significant amount of turning radius that would not accommodate electrical connections as taught by Meyer without significant invention. Further, according to Meyer (col. 6, lines 1-5), the matrix fields sensor arrangement composed of a plurality of sensors are arranged in a common carrier substrate as shown in Figures 2-5. Johanson simply could not accommodate such a complex and space consuming arrangement without significant invention. The Applicants do not understand how the Office Action intends to modify Johanson, alone or in combination with Berland, with the teachings of Meyer, to overcome the recited deficiencies. The Applicants assert that any proposed combination of the two or three cited references would require extensive invention and would ultimately fail to operate. Further, Applicants assert that any proposed combination of Johanson, Berland, and Meyer, fails to disclose the features set forth in the Applicants claim 1.

For at least the reasons set forth above, the Applicants respectfully assert that Applicants’ claim 1 is allowable over the proposed combination of Johanson, Berland, and Meyer. Additionally, Applicants’ independent claim 12 sets forth similar features as those set forth in claim 1 and is therefore allowable over the proposed combination for at least the reasons set forth above. Applicants request that rejection of Applicants’ independent claims 1 and 12 under 35 U.S.C. § 103(a) be withdrawn.

Dependent claims 2-11 and 13-21 depend from independent claims 1 and 12, respectively, and recite additional features beyond those set forth in the independent claims. Applicants respectfully submit that in light of the arguments provided above with respect to the rejection of independent claims 1 and 12 over the proposed combination of Johanson, Berland and Meyer, that rejection of dependent claims 2-11 and 13-21 over the proposed combination of references is now moot. For at least the reasons set forth above dependent claims 2-11 and 13-21

are allowable over the proposed combination of references. Applicants request that rejection of Applicants' dependent claims 2-11 and 13-21 under 35 U.S.C. § 103(a) be withdrawn.

Claims 22, 24, and 26 were rejected under 35 U.S.C. § 103(a) as being obvious over Berland in view of Bousset US Patent 5,850,665 ("Bousset") and claims 23, 25, and 27 were rejected under 35 U.S.C. § 103(a) as being obvious over Berland in view of Bousset and Ruegg US Patent 3,875,349 ("Ruegg"). Applicants respectfully traverse the rejections.

According to the Office Action, Berland at least fails to disclose a method of electrically sensing that a sound inlet tube is plugged or unplugged, and selecting an output based upon the electrical sensing. The Applicants agree.

The Office Action seeks to remedy the deficiencies of Berland by modifying the device of Berland with the teaching of Bousset. According to the Office Action, Bousset teaches electrically sensing (for connected or disconnected sound tube) that a sound tube is plugged or unplugged, and it would have been obvious to combine the teachings of Berland and Bousset to provide a more convenient hearing aid. The Applicants respectfully disagree.

Bousset teaches a control device for an integrated suction cleaner unit that provides an improved vacuum device. Bousset is not a hearing aid.

The Applicants assert that Bousset is not even remotely analogous art to hearing aids and is therefore incapable of combination with the hearing aid taught by Berland. The Applicants respectfully assert that it would not be obvious to combine a control device for an integrated suction cleaner unit with a hearing aid. It would not be obvious to combine components from a suction cleaner device with a hearing aid. The scope and scale of the two cited references are vastly different. The Applicants do not understand how one would combine a suction cleaner unit and a hearing aid, or components thereof. The Applicants assert that an immense amount of invention would be required to come up with any invention combining a hearing aid and a suction-cleaning device. Further, neither cited reference teaches or suggests a possible combination of hearing aids and vacuum devices.

For at least the reasons set forth above, the Applicants respectfully assert that the combination of Berland and Bousset fails to disclose every feature set forth in Applicants'

independent claims 22, 24, and 26. Therefore, the Applicants respectfully assert that claims 22, 24, and 26, are allowable over the proposed combination of cited references. The Applicants request that the rejection of claims 22, 24, and 26 over the proposed combination of Berland and Bousset under 35 U.S.C. § 103(a) be withdrawn.

Applicants respectfully submit that in light of at least the arguments provided above with respect to the rejection of independent claims 22, 24, and 26 over the proposed combination of Berland and Bousset, that rejection of dependent claims 23, 25, and 27 over the proposed combination of Berland, Bousset, and Ruegg is now moot. Therefore, dependent claims 23, 25, and 27 are also allowable over the cited references. Applicants respectfully request that the rejection of claims 23, 25, and 27 be withdrawn.

CONCLUSION

Applicants submit that based at least upon the foregoing, all pending claims are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

By: 

Fredrick T. French III
Reg. No. 52,524

Dated: July 6, 2004

McAndrews, Held & Malloy, Ltd.
500 West Madison Street - Ste. 3400
Chicago, Illinois 60661
(312) 775-8000